

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002700**Date Inspected:** 15-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** C.M. Chen , Xu Jun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Side Plate, Bottom Plates, Deck Sections, Floor**Summary of Items Observed:**

The Quality Assurance (QA) Inspector,Mahlon Lindenmuth,arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following:

QA Inspector, Lindenmuth, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication observed included but was not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP)on Side Plates and Bottom Plates,heat straightening of Side Plates and Bottom Plates.

Member identification and the work performed on the memeber is as follows:

OBG Jig Fixture (South) Segment 3BE(SEG16A)/Panel Point 23:

Caltrans QA observed ZPMC personnel performing backgouging on the cross bracing connection plate Complete Joint Penetration (CJP) weld at the FL2-1 lower flange. The weld joint is identified as SSD19A-PP023-132. ZPMC personnel were also observed aligning the Floor Beams FL2-2 with FL1-1(North). In order to align the segments,ZPMC personnel are using a hydrolic jack positioned against segments FL2-2(North)and FL1-1(North). See attached photo.

Caltrans QA observed ZPMC and ABF personnel performing digital mapping of the Segment 3BE(SEG16A).

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### Shop Fabrication:

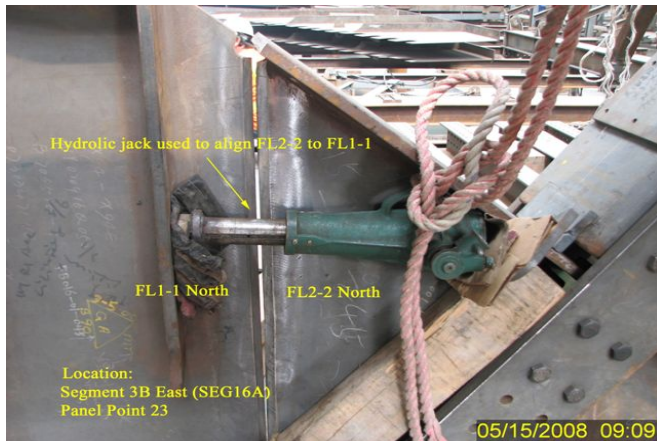
SEG019A-004: Caltrans QA observed ZPMC Quality Control (QC) personnel performing Magnetic Particle (MT) Testing of the backgouged root of the CJP weld joining SEG019A-004 to SEG019A-003. ZPMC QC did not note any rejectable areas in the backgouged section of the weld.

SEG013A: Heat straightening of the member was performed by placing(3)four ton weights along the side of the CJP weld splice joining SP17A to SP25A. The heat straightening was performed using an approved procedure and was monitored by ZPMC Quality Control personnel.

All work observed,unless otherwise noted,appeared to generally comply with the contract documents.

### General Notes:

Caltrans QA noted that there are currently fourteen Floor Beams located in the North end of the shop awaiting further fabrication processing.



### Summary of Conversations:

#### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lindenmuth,Mahlon

Quality Assurance Inspector

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**Reviewed By:** Cuellar,Robert

QA Reviewer